

exhibition about amateur radio that will take place at the Boston Museum of Science in late March. They have asked us if we would like to participate in the presentation, along with two or three other clubs in the area and make it a joint venture of top shelf caliber. Complete details of what our exhibit will be like, has not been completely decided on at this writing but representatives of our club will try to attend the planning sessions and report back to the membership, a detailed account of their findings.

Harmonics About Town



As a result of the Natick Mall Message Fair, the club earned the BRASS POUNDERS LEAGUE award for originating 100 messages or more in one calendar month. In addition to those who served at the Mall, we would like to thank those hams who took our traffic and forwarded it through the National Traffic System, (NTS), to its final delivery, another example of the teamwork and spirit of the nation's hams. For the records, we originated 809 pieces of traffic. A hearty WELL DONE to all.

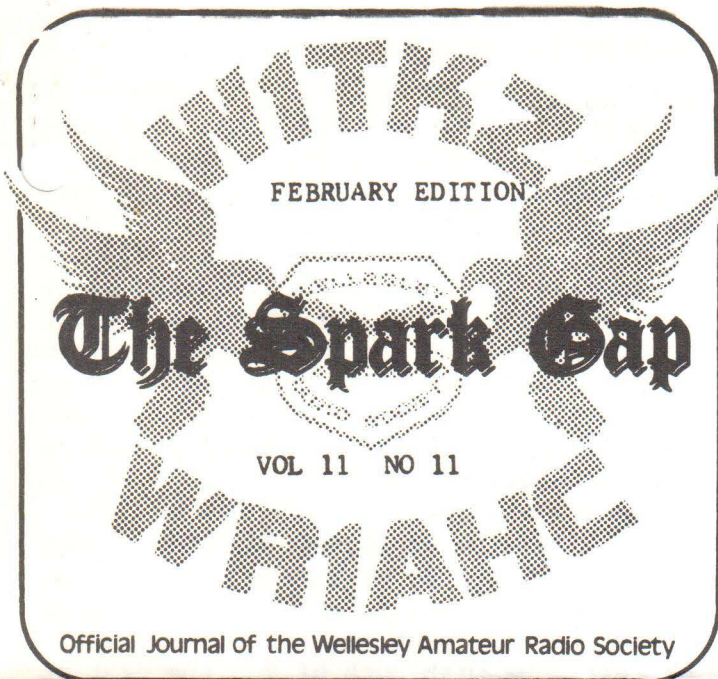
It was gratifying to see so many members at our first meeting of the year on Jan. 6th. We had 47 members in attendance which shows the enthusiasm that this club is generating. As far as membership goes, we are very close to the 100 member mark. Since it is pretty hard to call everyone by name, at future meetings, if you don't know the guy sitting next to you, just introduce yourself and make him or her, feel at home, as this is one big family of hams, all united for one common interest and it is no fun attending a meeting if you don't know anyone, so give your neighbor a little consideration, it will further help mold the club into a more closely knit group. Your cooperation will be appreciated by all.

A couple of the fellows took a trip down to the ARRL recently to get some new training materials for the novice and

MEETINGS THIS MONTH:

FEBRUARY 3 (first Thursday)
FEBRUARY 17 (third Thursday) 7:30 P.M.

Intermediate Bldg., Wellesley Hills, Mass.



Where does all the time go? It is that time again to come visit with you and I guess, with the Holidays behind us, that is why it doesn't seem that long ago since our last edition. We hope everyone had a joyful one.

Since revamping the appearance of the 'GAP', we have been getting favorable comments from all around and it makes us feel good that other clubs look forward to this paper, and much of it can be attributed to you, the members, who send in your articles that make this thing go. Keep sending them in, for it makes good copy for all to enjoy.

President's Message

by Don Chesley, WA1HVS

I would like to express my thanks and gratitude to all those that participated in the December Natick Mall Message Fair. Everyone did a great job and once again, it was a big success. The stations at the Mall originated more than 800 pieces of traffic. The public relations dept. at the Mall have approached us and want us to set up operations again for Mothers Day Message Fair. I would be interested in knowing your reactions to this request and will bring your thoughts with you to the next meeting when we will be discussing this topic.

During the last meeting, a representative of the Middlesex Radio Club, and a member of our club also, Bob Novack, WA1LJB, presented to us, an outline on an

HARMONICS-Cont'd

general classes and I heard one gal comment how ours was one of the most active clubs in the country. Thought you would like to know that our work isn't going unnoticed. If you have never been to the League Headquarters in Newington, Ct., you should plan to make that trip on your own or on one of the group visits we undertake in the warmer weather. It is an interesting place to see and if you want to sit and operate at the station console, be sure to bring along the original copy of your license. At this writing we haven't set an exact date for the ARRL visit but will keep you informed regarding same.

Our novice and general courses are now underway, almost. The general class had to be cancelled due to the weather but it will commence on Monday nights under the leadership of Mike Adlerstein, WALTUN. At the novice class we had 39 students show up. A good number considering the bad road conditions at the time. This class is conducted by Don Chesley WAIHVS.

OFFICIAL BULLETIN

In case you haven't been informed as yet, the FCC has dropped any examination fees for upgrading of your licenses. This is great news and now you fellows should take advantage of this bargain and get your licenses upgraded, you certainly can't beat the price. This also refers to obtaining a 1 X 2 call if you are an extra class ticket holder.

Hereabouts...

Over the holidays we had the pleasure of meeting some of our guys who were home from their respective schools, and all wanted to say hello to you. First was one of our older members ALLAN KUONG, WAIKSCS, who is attending Annapolis Naval Academy. JIM IDELSON, WAIQJU, who is home from the Worcester Polytech Institute and to NELS ANDERSON, WAIUHU, who went home to Connecticut for his vacation. We wish you all a happy and prosperous 1977 and do keep us informed as to your progress so we can keep the members abreast of your activities.

Roger Wilmarth WAIKRSV, is sporting a new home brew 2 meter synthesized trans-

HEARABOUTS, cont'd

ceiver.

Both Bill Downing WAIPOY and Paul Ranzazzo WAIKXU, have the new I-COM IC22S transceivers and say that they are a neat unit for 2 meters.

In case you hear WD4AOH/1 on the bands, that is Bob Arnold's new call. He was the former WAIUZZM but since he will be getting in June to Florida, his home state, he got a '4' call. Bob is now enjoying all the benefits available to new generals and is active on all the bands.

We will also be losing Ed Jansson, WAIUTJ, as he will be moving to Florida. Ed, like his father Dick, has been a tireless worker for the club and his absence will be felt. We wish both of you the best of everything and hope your association with our club will be a lifelong memory.

ANNOUNCEMENT

On November 23rd, Walt Lenk, K1YTY, started an "experimental" AREC Net through the 2 meter repeater 96/36 machine. As many of you know, Walt served the Society as Secretary for about 5 years in the 1960s era, and for more than 7 years, he has supplied the Wellesley Townsman with publicity about our activities.

The purpose of the 2 meter FM AREC Net was to help all of us realize the potentialities of the 2 meter FM system in case of a local emergency. The Net could have also provided the opportunity for both the Middlesex and Wellesley Clubs to discuss on the air, their future programs in order to gain new members. Walt had hoped both Clubs would benefit from the AREC activity.

Since November 23rd, there were few and irregular check ins into the Net. There seemed to be little interest in a Net of this nature. On December 28th, the 2 meter FM AREC Net was discontinued in favor of AREC operations on the AM portion of the band. For the past 3 yrs AREC operations on AM has been successful. In the future, Walt hopes there may be more interest in more formalized Net activities on the FM portion of the band.

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society



EDITOR-IN-CHIEF, JAMES W. HATHERLEY

THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS SOLE PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, F.C.C. RULES & REGULATIONS CHANGES AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE SPARK GAP AND MAY SEND THEIR ARTICLES (TYPEWRITTEN IF POSSIBLE) TO THE EDITOR-IN-CHIEF OR TO THE CLUB ADDRESS.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION AND ENCOURAGED PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY-\$5.00. CLUB YEAR RUNS FROM SEPTEMBER 1 - JUNE 30. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE THE WELLESLEY AMATEUR RADIO SOCIETY, 324 WASHINGTON STREET, WELLESLEY HILLS, MASS 02181



CLEARING THE AIR

The FCC has released a Notice of Inquiry which contains the proposed amateur radio frequency allocations it will present to the World Administrative Radio Conference in 1979. Since we are all interested in what is in the future, we put a copy of these proposed bands and frequencies on the bulletin board in the club room. Here you can look them over at your leisure but it is too lengthy to report in the Spark Gap at this time. As things unwind, we will do our best to keep you up to date.

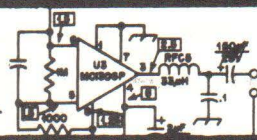
HINTS AND KINKS:

If difficulty is experienced forcing the vinyl jacket of a coaxial cable into a connector or reducing sleeve, a shot of aerosol silicone spray on the jacket will usually allow the cable to be easily fitted into the connector.

LATE BULLETIN FROM ARRL HQ JANUARY 15th.

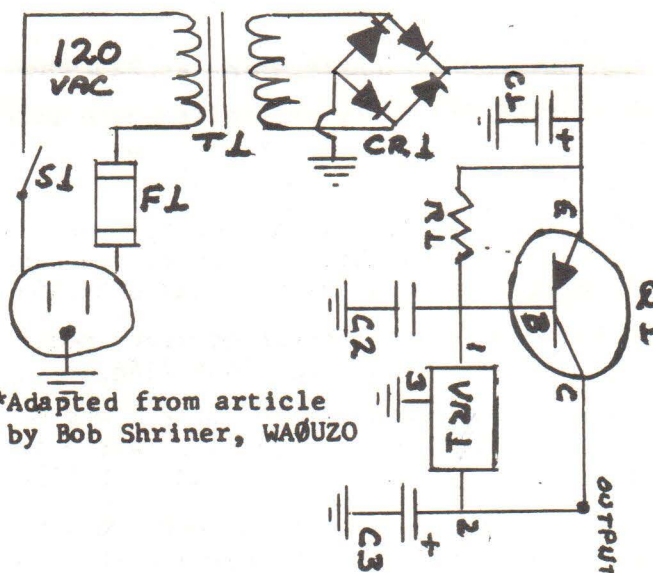
Effective March 1, 1977 the FCC will issue an instant permit to those licensed

Tek Tok



UNIVERSAL 4 AMP POWER SUPPLY

Here is a good bench or FM rig supply that can be used with up to a 4 amp load. For less than 1 amp, Q1 Need not be used. Double C1 Value for 2 amp, 4 times the value for 4 amp. T1 should be at least 3 volts over the output voltage for maximum power output. Q1 can be any PNP silicon transistor. Both VR1 and Q1 should be mounted on a heatsink. Values shown are for 12 volt operation. By changing T1 and VR1, other voltages can be obtained. VR1 is available from Radio Shack.



*Adapted from article by Bob Shriner, WA0UZO

PARTS LIST:

- T1-12-15 volt fil transformer
- CR1-50 PIV 6 amp bridge rectifier
- C1-2200 mfd 25 Volts
- C2-1 mfd
- C3-.1 mfd
- Q1-MJ2955 or HEP equivalent
- VR1-MC7812, RS7812 or equivalent
- R1- 3 ohm 2 Watt
- F1- 2 amp fuse

HELP: We invite you, the readers of this column, to send in any articles that are of use to other hams for TEK TOK. Your cooperation will be appreciated and will carry your name and call to the article. Thank you. The Editor.

LATE BULLETIN CONT'D

hams who successfully pass their upgrade exams. This good for 90 days or until new ticket arrives from FCC.

ELECTRONIC EXCHANGE



For Sale: 146.96 and 147.36 two meter xtals for Heath HW202-\$7.50 for pair.

1/4 wave 40 meter and 1/4 wave 20 meter vertical antennas, homebrew, with 3/8ths of a mile of wire for ground radials.. \$50.00 (negotiable) Property of Dick Jansson but contact Chris Wiles at 235-9095.

Regency HR 212 fully crystallized with mike, 25 watts out. \$200.00 or will swap for a walkie. Call Irving WA1CDW 527-1633.

I-COM 230 2 meter transceiver synthesized, in good condition with 2 sets of mounting brackets. \$300.00. Dick WA1HRV 655 2366.

HQ 180 Hammarlund general coverage receiver. \$225.00. Dick WA1HRV 655 2366.

Yaesu Monitor Scope XO-100 with 9 mhz option, mint condition. Original carton and manual. \$150.00 Call 785 1423 Bob K1ZL

Yaesu Landliner phone patch and speaker SP-101PB. Never used. Original carton and manual. \$50.00 785 1423 Bob K1ZL

2 mtr antenna Hy-Gain GPG-2 with pole, tripod and coax. You take it off roof. \$15.00 Call 785 1423 Bob K1ZL

G.E. Progline 2 mtr transceiver, mint condition, just overhauled and peaked for Navy Mars VHF plus 04/64, 22/82, 07/67 and 52/52 crystals. All xtals in ovens, easily peaked for other repeaters. Measured output 20 watts. Installed Ameco pre-amplifier give high sensitivity comparable to the big Clegg. Transistor power supply. Complete with manual and original cables for mobile or base operation. Even has original lock and key for security. \$200. Will throw in G.E. Progline 50 watt power supply as is. Call 785-1423 Bob K1ZL

"Timeout!"

By NED SWARTZ, K1SOP

This marks the appearance of a new repeater column, TIMEOUT. TIMEOUT will, hopefully, be a regular feature of both the SPARK GAP and QRZ, the Middlesex Radio Club newsletter. It will contain repeater news, announcements, operating hints and maybe some idle gossip.

A new repeater bulletin is being prepared. The old bulletin, which was mailed to all Middlesex club members in April, and distributed at Wellesley meetings, is now out of date because of the changes in antenna, coverage and some technical adjustments. Printing of the new repeater bulletin is being held up while the Middlesex club decides whether to change their name or not. Look for it next month with your QRZ or GAP.

It seems like a good time to reprint a paragraph from the old bulletin: Did you know that the word "break", has a special meaning on 2 meter FM? On some of the larger repeaters, especially in the New York City area, "break" implies a sense of urgency, and "break-break" means an emergency situation and "double break" is similar to "break-break". All stations must IMMEDIATELY yield to the breaking station. Naturally, discretion must be used. Crying wolf while the wolf is away is frowned upon. IT IS RECOMMENDED that the word "Call", or your callsign, be used for ordinary breaking. Avoid using "break", for ordinary situations.

NEW CLUB MEMBERS

On behalf of the entire club we wish to extend our Welcome to the following people who have joined the club: Randall Sneider, Jim Novakoff, Stephen McHale, Bruno Vasil Sr., Bruno Vasil Jr., Erik Thoresen, Sid Bennett, Charlie McDonald, Jordan Ring, Nina Brodie, Bob Geffen. We also have a few old members in the fold who are, Allan Kuong, Bill Emerson, Bob Novack and last but far from least, Marshall Cannell. I'm sorry about not inserting your call signs but at this writing, am not sure who is what but you will be so listed in the regular printout as it takes form. We encourage all of you to take advantage of all the club's facilities.

ANNOUNCEMENT

MAKE A NOTE ON YOUR CALENDAR NOW, so u dont forget; On February 3rd, there will be an outstanding lecture and slide presentation on "The rarest of DX" at this meeting. It will be presented by none other than Bob Beaudet, WLYRC, President of the Southern New England DX Society. Bob's name is well recognized in all DX circles as Manager of expeditions such as XV5AC(Viet Nam), XU1AA, 9X5AA and others. This night promises to be an intriguing experience for all. So whether you are a DX hound or a rag chewer, you are sure to enjoy this presentation. DX has always been an interesting topic, but when it is from the 'horses mouth', need I say more?

CLUB SWEATSHIRTS: Orders are now being taken for club sweatshirts. A sample was on display at the last meeting and again for this one Feb. 3rd, after which time, the order desk will be closed. We have asked a major manufacturer for quotes on a quantity of tutone blue and white baseball style sweatshirts of good quality. The price we are quoted will primarily determine the selling cost to the members, estimated somewhere in the neighborhood of six or seven dollars. So, if you're interested, sign up now. This is a one time offer! (Editor's note: I have seen this shirt and it is a real winner and am sure that once you have seen it, you will want to wear one to let others know that you are a member of the Wellesley Amateur Radio Society.)

CLUB "VHF DXPEdition" and CAMPOUT:
In the spring, a weekend club hiking trip to Sandwich Mountain, N.H. (3950'), will be planned if there is sufficient interest. Sandwich is located just south of Waterville Valley and was chosen for its closeness to driveable roads. From this point of ^{dis}embarkation, the hike to the top is relatively gradual and will take about 3 hours, with much DX to be found on the way and at the top. There are two untouched mountain lakes along the way, one of which, we will be camping on, either in tents or a cabin provided for hikers. It should be a different and exciting weekend, so, if you are interested, sign up at the Feb. 3rd meeting.

ACTIVITIES =

On Saturday night, January 15th, the Executive Board held a meeting to discuss our Annual Auction. For you newcomers to the club, this is a sale of radio gear on an auction basis that the club sells for all amateurs that bring their gear for a percentage of the sale. This money goes into our treasury and is vital to the club for activities held throughout the year. It could also be a good place to obtain that piece of electronic equipment you may be looking for too. Anyways, it was decided that we will hold the auction at the Wellesley High School because it affords more seating capacity than our previous site. You will be hearing more about the auction at the coming meetings but in order to conduct an auction successfully, we must have the cooperation of the members as there is much work involved in order to make this happen. We feel sure you will want to participate in this exciting event as it has always been fun for all those who take part and once again I remind you, you will only get out of the club what you put into it. We will keep you informed as we proceed with this event.

We also discussed at this meeting, new possible locations to have Field Day 1977. Last year, as you know, we went out to Fort Strong on Long Island in Boston Harbor. We will keep this site in mind but will also, at the same time, be looking at other sites that may be available to us. Believe it or not, Field Day is in June but the planning must be taking place now in order to assure us of an interesting spot to conduct this "exercise of preparedness". We hope to have that big generator, now in the basement of the club, operational and mobile for this operation. There will be a club discussion on this as time allows, perhaps at the meeting of Feb 17th. This will give you time to arrange your constructive thoughts for the meeting.

We have also been looking into the possibility of getting a bulk mailing rate. Where our club is growing as fast as it is 13 cents on every copy of the GAP can add up to a tidy sum and the new rate could be a blessing.

profiles

by Bob Arnold, WD4AOH

Well, here it is the end of January already and I still haven't gotten ahead of myself on interviews for PROFILES. It seems that there just aren't enough hours in the day to accomplish everything one has in mind.

I had originally intended to interview everyone personally at their homes, but it doesn't appear that it will be possible to do that. It looks like I will have to do most of the rest of the interviews over the telephone or at club meetings. This will make it necessary for each member to furnish me with a suitable photograph for printing with your PROFILE. Black & White photos would be best, although color photos with good contrast will do nicely. Send the photo of your choice to my home, along with your name and phone number, and I will contact you for an interview.



Last week I visited the home of our club president, Don Chesley, WA1HVS, and not only learned about him personally, but also was given a rundown on the history of the club.

Don has been the president of the club since 1973. He was instrumental in reviving the club, which at that time was at a standstill.

Don is dedicated to Amateur Radio and to the Wellesley Club as is evidenced by the long hours he puts in planning and working on club projects.

Don was born in Newton in 1940, and with the exception of his military service, has lived in the area since.

He graduated from Newton Vocational High School in 1958, where he was in the co-operative education program and studied electronics. He has also taken a course in electronic engineering from Capitol Radio Engineering Institute in Washington, DC, and studied Computer Management at Northeastern.

Don spent 8 years in the Air Force from 1958-67, five years of which was spent in the special forces working in communications. During that time he spent two years in Alaska, where he held KL7FEP, working in the control tower. While in the chilly North country, Don hunted grizzly bear, did some gold mining, and was a disc jockey for the Armed Forces Radio Service.

Don said he had a couple of close calls while flying, when the aircraft lost power, but in both cases the pilot was able to make a safe landing. The only injury he received in the service was while on maneuvers in South Carolina, where he fell from the top of a truck, bounced off a motor generator, and rolled 70 ft. down a hill, breaking a leg. He said it wasn't too bad though, he got a four week vacation out of it. (HI)

Don was also stationed at McDill AFB in Tampa, FL, where he was WB4ANM, and has seen France, Panama, Puerto Rico, and the Philippines.

Don now works in the computer field for Honeywell, as a computer systems specialist.

Don has been licensed since 1964, and as mentioned before, has held calls KL7FEP and WB4ANM. His enthusiasm for Amateur Radio goes far beyond that of the average Ham in this day and age. That fact is evidenced by the amount of 'Homebrew' gear in his shack. He is presently working on a 6 meter repeater that he hopes to have operational within the next couple of months.

Don's whole family will soon be licensed if they continue at their present rate. His XYL, Luella, and the first harmonic, Cheryl, recently passed their Novice exams, and his oldest son is working toward his novice. Don and Luella have two more children and I'm sure it won't be long before they too will have their tickets.

Along with Amateur Radio, Don also enjoys photography, and although he has not had a chance to expose much acetate in the past few years, he says he has been a shutterbug since he was a youngster. He especially enjoys 3-D photography. ■

"SOLVING A SPACE PROBLEM OR THE NO SHACK, SHACK!"

In September '76, after an 18 month inactive period, the 'Ham Bug' once again bit and I purchased a complete Heathkit station. Now I live in government quarters, and extra space is a commodity requested priority one, and delivered only by an act of Congress, (and you know how often they act!)-- Simply, there is none.

Much to the XYL's displeasure, a corner of the dining room was designated as the shack. She was even less enthusiastic about the whole idea at the sight of all that gear stacked on top of a 20" x 40" desk, with lead-ins, patch cords and power cords hanging like so much spaghetti all over the place. And frankly, it didn't impress me one bit either.

Shortly thereafter I ran across a picture of a neat looking console in an old '64 edition of the ARRL Handbook and decided that a console, of some sort, would not only do justice to the beautiful gear, but also cool the XYL down a little.

One console my minds eye pictured had to have three basic characteristics; it had to be compact and portable, be inexpensive to construct, and be somewhat attractive. The latter to maintain domestic tranquility.

The first characteristic was achieved by constructing the console in two levels, and so as to slide on top of the 20" x 40" desk.

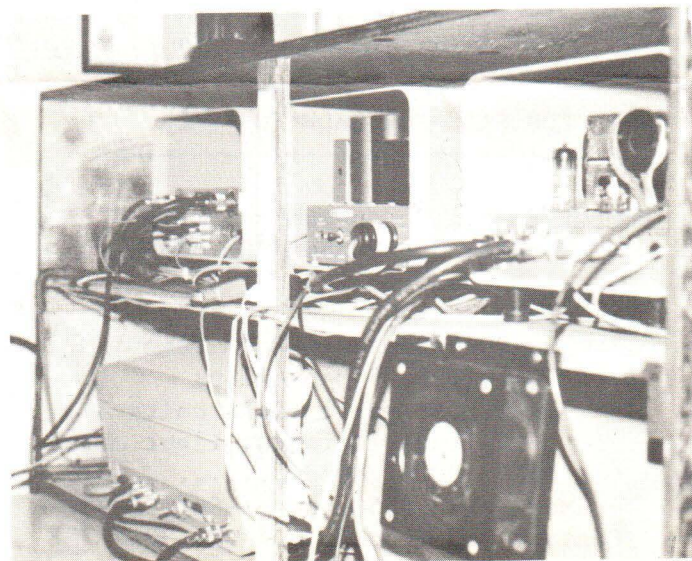
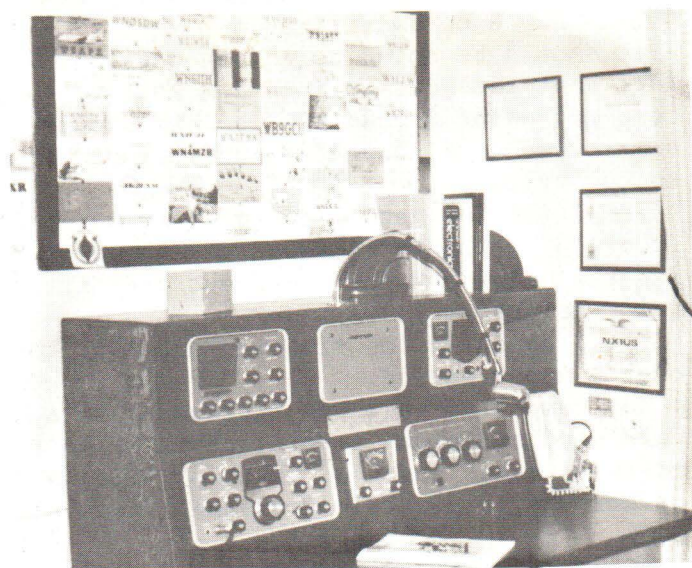
I used plywood throughout, fastening it with white glue and 1" brass wood screws. Although I had a considerable amount of material left out of the two sheets of plywood, the total cost of materials, including stain and varnish, was under \$35. The second characteristic was now satisfied.

The third? Well, my wife is still speaking to me.

With the exception of the angles cut for the front panels, for which a table saw was used, all cutting was done with either a circular saw or a sabre saw. As mentioned before, all fastening was done with white glue and brass wood screws.

The unit will accommodate gear up to 7" high and 14" deep on the lower level, 9" high and 13" on the upper level, and combinations of width to approximately 45".

With a few modifications during construction,



larger gear could be accommodated without an increase in cost, although some portability would be sacrificed.

It should be noted here that due to the fact that the gear is in a box so to speak, some method of forced air cooling should be provided. A couple of muffin fans will do the trick.

Templates for each piece of gear were cut from 1/8" masonite (cardboard will work), and the holes for each were cut and fitted prior to assembly.

Total construction time was about 12 hours over a 4 day period.

The completed unit was finished with a dark wood stain and several coats of polyurathane satin varnish, which provides a reasonably hard, stain resistant finish.

73's

Bob Arnold, WD4AOH

TYPICAL SCENE IN THE WEE HOURS OF THE NITE
AT THE RECENT NX1US QSO PARTY WEEKEND.....



(Here, Jim Hatherley, "the Boston Yankee", assures us that "This is better than golf")

FOR SALE*FOR SALE*FOR SALE

COMPLETE 35mm Photography System

-- Vivatar 420SL 35mm SLR w/50mm
f1.9 lens

-- Also--

90-230mm f4.5 Zoom lens

55mm f2.5 Macro lens

2 Electronic flash units

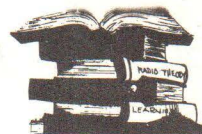
-- filters, tripods, light meter--

MUCH, MUCH, MORE.....

-- More than \$650. new---Sell \$490.

Contact Bob Arnold, WD4AOH, 328-8758

education corner



Due to the recent blizzard, the first session of the General Class was cancelled. It was rescheduled for January 17th at 7:30pm and will be run by Mike Adlerstien and others. If anyone has any doubts about the classes being held due to stormy weather, listen to WBZ, WRKO or WGTR radio for word of cancellation. We have decided to implement this procedure of notifying the media rather than engage in a telephone calling campaign.

* * * *

The first Novice class of 1977 was held January 12th and 38 people attended. Don Chesley, WA1HVS is teaching this time around and we are glad he had a good turnout. Meanwhile we are still awaiting the test results of the Fall Novice class and will list callsigns as soon as that information is made available. Here's hopin' that all 29 of you grads become part of Amateur Radio (not to mention members of W.A.R.S.)^o

"New Tickets"



Congratulations to Bob Arnold, formerly WA1UZM and now WD4AOH on passing his general. He can now be heard often on 2FM.
"Be talking at you Arnie!"



First harmonic of Bob And Judy Arnold, WD4AOH; getting her feet wet early, 2 year old "Kim" Arnold.



The Spark Gap



**WELLESLEY
AMATEUR RADIO
SOCIETY**

324 Washington Street
Wellesley Hills, Massachusetts 02181



WAITUH
NELS

ANDERSON